FILE 'CAPLUS' ENTERED AT 15:09:36 ON 15 APR 2005

| | | | |
|---|---|---|---|
| L1 | 19549 | S | CHITOSAN |
| L2 | 27952 | S | CYCLODEXTRIN |
| L3 | 340 | S | L1 AND L2 |
| L4 | 206883 | S | CONJUGAT? |
| L5 | 11 | S | L3 AND L4 |
| L6 | 74841 | S | OLIGONUCLEOTIDE |
| L7 | 428492 | S | NUCLEOTIDE |
| L8 | 713618 | S | DNA |
| L9 | 979555 | S | L6 OR L7 OR L8 |
| L10 | 24 | S | L9 AND L3 |
| L11 | 30 | S | L10 OR L5 |

L11 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:254446 CAPLUS
DOCUMENT NUMBER: 142:322747
TITLE: Keratinocyte growth factor-2 formulations
INVENTOR(S): Gentz, Reiner L.; Chopra, Arvind; Kaushal, Parveen; Spitznagel, Thomas; Unsworth, Edward; Khan, Fazal
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 218,444.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 6869927 | B1 | 20050322 | US 2000-585541 | 20000602 |
| US 6238888 | B1 | 20010529 | US 1998-218444 | 19981222 |
| NZ 521590 | A | 20040430 | NZ 1998-521590 | 19981222 |
| US 2002016295 | A1 | 20020207 | US 2001-853666 | 20010514 |
| US 6653284 | B2 | 20031125 | | |
| US 2004063639 | A1 | 20040401 | US 2003-695957 | 20031030 |

PRIORITY APPLN. INFO.:
US 1997-68493P P 19971222
US 1998-218444 A2 19981222
US 1999-137448P P 19990602
US 1999-160913P P 19991022
NZ 1998-505324 A1 19981222
US 2001-853666 A3 20010514

AB The invention is directed to liquid and lyophilized forms of keratinocyte growth factor-2 (KGF-2) and derivs. thereof. This invention further relates to the formulation of KGF-2 to promote or accelerate soft tissue growth or regeneration, such as in wound healing, or in treating mucositis or inflammatory bowel disease. For example, a premix formulation containing 3.3 mg/mL KGF-2 Δ33 mutant, 10 mM sodium citrate, 20 mM sodium chloride, 1 mM EDTA, 2% weight/volume glycine, 0.5% weight/volume sucrose, and water (pH 6.2) was prepared and subsequently lyophilized. The formulation retained its in vitro bioactivity for up to 12 mo at storage conditions at or below 25°.

REFERENCE COUNT: 129 THERE ARE 129 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:140662 CAPLUS
DOCUMENT NUMBER: 142:214819
TITLE: Combined nanotechnology and sensor technologies for simultaneous diagnosis and treatment
INVENTOR(S): Melker, Richard J.; Dennis, Donn Michael
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 345,532.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2005037374 | A1 | 20050217 | US 2003-744789 | 20031223 |
| US 2002177232 | A1 | 20021128 | US 2002-154201 | 20020522 |
| US 2004076681 | A1 | 20040422 | US 2002-274829 | 20021021 |
| US 2004081587 | A1 | 20040429 | US 2003-722620 | 20031126 |

PRIORITY APPLN. INFO.:
US 1999-164250P P 19991108
US 2000-708789 B2 20001108
US 2001-292962P P 20010523
US 2002-154201 A2 20020522
US 2002-274829 A2 20021021
US 2003-345532 A2 20030116

AB Systems and methods for diagnosing and/or treating conditions, diseases, or disorders. The present invention uses nanoparticle-based assemblies, which comprise a nanoparticle; a surrogate marker; and a means for detecting a specific chemical entity. Such nanoparticle-based assemblies combine nanotechnol. and sensor technol. to provide an efficient and accurate means for diagnosing a condition, disease, or disorder as well as

for focused treatment regimens.

L11 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:57462 CAPLUS
DOCUMENT NUMBER: 142:151492
TITLE: Apparatus, method, and reagents for detection of target substances based on interaction with elliptically polarized light-emitting materials
INVENTOR(S): Matsunami, Yuki; Washisu, Shintaro; Kinoshita, Takatoshi; Kodama, Tomohiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2005017094 | A2 | 20050120 | JP 2003-181728 | 20030625 |
| PRIORITY APPLN. INFO.: | | | JP 2003-181728 | 20030625 |

AB The apparatus has (a) a means to irradiate an object with linearly polarized light, (b) a means which can emits elliptically polarized light upon irradiation with the linearly polarized light and change property (e.g. CD spectrum) of the elliptically polarized light upon interaction with a target substance (pathogens, biol. substances, toxic substances, etc.), and (c) a detector of the elliptically polarized light. The reagents used in the apparatus have function of (b) and contain at least a target-capturing site capable of interacting with the target. Thus, a poly(γ-methyl-L-glutamate) film was soaked in 2-aminopyridine solution under a vacuum at 50° for 30 min and the resulting \Nω-2-pyridylmethyl-L-glutamine-γ-methyl-L-glutamate copolymer film was reacted with CuCl2.H2O to give a detection reagent wherein N-2-pyridylmethylpropionamido group formed equimolar complex with Cu2+. Poly(4-vinylpyridine) (I) was added to the reagent planed on a quartz glass. Change in 205-nm neg. peak of the CD spectrum showed interaction between the reagent and I and the peak intensity was dependent to amount of I.

L11 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:759628 CAPLUS
DOCUMENT NUMBER: 141:265993
TITLE: Stable and taste masked pharmaceutical dosage forms by using porous apatite grains
INVENTOR(S): Lin, Chang-Yi; Lu, Yunn-Tzer; Liu, Dean-Mo
PATENT ASSIGNEE(S): Nanotrend Ino-Tech Inc., Taiwan
SOURCE: U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Ser. No. 386,546.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2004180097 | A1 | 20040916 | US 2004-800622 | 20040316 |
| US 2004180091 | A1 | 20040916 | US 2003-386546 | 20030313 |
| PRIORITY APPLN. INFO.: | | | US 2003-386546 | A2 20030313 |

AB A stable and taste masked pharmaceutical dosage form includes porous apatite grains and a drug entrapped in pores of the grains, wherein the grains have a size of 0.1-1000 μm and the pores of the grains have an opening of 0.5-300 nm. A process for preparing the stable and taste masked pharmaceutical dosage form is also disclosed. A powder mixture containing 17.43 g magnesium metaphosphate, 117.03 g monocalcium phosphate, 40.83 g potassium dihydrogen phosphate, 116.2 g calcium hydroxide, and 10 g calcium carbonate, was prepared into a slurry with a mixture solvent of acetone and ethanol as a diluting medium. The total weight of the starting powder is 301.5 g in this study, wherein the Ca/P ratio in the starting powder mixture is 1.55. The slurry was subject to extensive grindingm resulting in an average particle size of 95 nm in diameter The calcium carbonate powder employed is in nanometric scale, having a particle size of 7-10 nm in diameter

L11 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:488868 CAPLUS
DOCUMENT NUMBER: 142:317019
TITLE: Synthesis of **chitosan** microspheres containing pendant **cyclodextrin** moieties and their interaction with biological active molecules
AUTHOR(S): Georgeta, Mocanu; Elie, About-Jaudet; Didier, LeCerf; Luc, Picton; Adrian, Carpov; Guy, Muller
CORPORATE SOURCE: "Petru Poni" Institute of Macromolecular Chemistry, Iasi, 6600, Rom.
SOURCE: Current Drug Delivery (2004), 1(3), 227-233
CODEN: CDDUBJ; ISSN: 1567-2018
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new route to obtain **chitosan** derivs. containing **cyclodextrin** moieties as pendant groups was developed. The **chitosan** microspheres, obtained through crosslinking with glutaraldehyde of an acetic acid solution of **chitosan**, in an organic suspension medium, were reacted with chloro-acyl **cyclodextrins** in organic basic solvents. The acyl **cyclodextrin** moieties are linked to the **chitosan** microspheres through C-N bonds, with the elimination of HCl; higher amts. of acyl **cyclodextrin** are linked to the microspheres with a smaller crosslinking degree. The **chitosan-cyclodextrin conjugates** retain higher amts. of bioactive substances (nalidixic acid, piroxicam) or of p-nitrophenol (model substance) than their parent **chitosan** supports, both by ionic forces and by the formation of inclusion complexes in the **cyclodextrin** inner cavities. After these preliminary studies, one can appreciate that the **cyclodextrin-chitosan conjugates** could be used as supports for chromatog. sepns. or controlled release drug systems.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:252369 CAPLUS
DOCUMENT NUMBER: 140:269531
TITLE: Autologous ghrelin and encoding nucleic acid and foreign T cell epitope **conjugates** for vaccination against obesity and excess body fat increase or loss in human and animal
INVENTOR(S): Boving, Tine Elisabeth Gottschalk; Klysner, Steen
PATENT ASSIGNEE(S): Pharmexa A/s, Den.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004024183 | A1 | 20040325 | WO 2003-DK592 | 20030912 |
| WO 2004024183 | B1 | 20040513 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DK 2002-1345 A 20020912
US 2002-410164P P 20020912

AB Disclosed are novel methods that generally rely on immunization against autologous ghrelin. Immunization is preferably effected by administration of analogs of autologous ghrelin, said analogs being capable of inducing antibody production against the autologous ghrelin polypeptides. Especially preferred as an immunogen is autologous ghrelin, which has been modified by introduction of one single or a few foreign, immunodominant and promiscuous T-cell epitopes. Also disclosed are nucleic acid vaccination against ghrelin and vaccination using live vaccines as well as methods and means useful for the vaccination. Such methods and means include methods for the preparation of analogs and pharmaceutical formulations, as well as

nucleic acid fragments, vectors, transformed cells, polypeptides and pharmaceutical formulations.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:1006787 CAPLUS
DOCUMENT NUMBER: 140:47532
TITLE: Quaternary ammonium **cyclodextrins** as pharmaceutical penetration enhancers
INVENTOR(S): Kis, Georg Ludwig; Schoch, Christian; Szejtli, Jozsef
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003105867 | A1 | 20031224 | WO 2003-EP6192 | 20030612 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW | | | | |
| RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR | | | | |
| BR 2003011722 | A | 20050301 | BR 2003-11722 | 20030612 |
| EP 1515729 | A1 | 20050323 | EP 2003-740232 | 20030612 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |

PRIORITY APPLN. INFO.: EP 2002-13074 A 20020613
EP 2002-28554 A 20021220
WO 2003-EP6192 W 20030612

OTHER SOURCE(S): MARPAT 140:47532
AB The use of quaternized ammonium **cyclodextrin** compds. in the preparation of an anti-infective pharmaceutical as preservative and penetration enhancer is disclosed. Thus, a thin-layer film composition contained Mowiol 26-88 100, HPC 40, quaternary ammonium β- **cyclodextrin** derivative 50, and glycerin 10 mg.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:913055 CAPLUS
DOCUMENT NUMBER: 139:399770
TITLE: Medical goods comprising heparin or **chitosan** -based hemocompatible coating
INVENTOR(S): Horres, Roland; Linssen, Marita Katharina; Hoffmann, Michael; Faust, Volker; Hoffmann, Erika; Di Biase, Donato
PATENT ASSIGNEE(S): Hemoteq G.m.b.H., Germany
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003094990 | A1 | 20031120 | WO 2003-DE1253 | 20030415 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10221055 | A1 | 20031127 | DE 2002-10221055 | 20020510 |

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|---|---|---|---|---|
| DE 10261986 | A1 | 20040318 | DE 2002-10261986 | 20020510 |
| EP 1501565 | A1 | 20050202 | EP 2003-729829 | 20030415 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003011446 | A | 20050315 | BR 2003-11446 | 20030415 |
| PRIORITY APPLN. INFO.: | | | US 2002-378676P | P 20020509 |
| | | | DE 2002-10221055 | A 20020510 |
| | | | WO 2003-DE1253 | W 20030415 |

AB The invention relates to oligo- and polysaccharides containing the sugar structural element N-acylglucosamine or N-acylgalactosamine, in addition to the use thereof for producing hemocompatible surfaces and to methods for coating surfaces in a hemocompatible manner with said oligo- and polysaccharides, which constitute the common biosynthetic precursor substances of heparin, heparan sulfates and **chitosan**. The invention also relates to methods for producing the oligo- and/or polysaccharides, in addition to diverse application options involving hemocompatible surfaces. The invention specifically relates to the use of the oligo- and/or polysaccharides on stents involving at least one hemocompatible coating that has been applied according to the invention and that contains an anti-proliferative, anti-inflammatory and/or athrombogenic active ingredient, to methods for producing said stents and to the use of the latter for preventing restenosis. Thus desulfated and reacetylated heparin was prepared; the Ac-heparin product was used for coating coronary metal stents. The stents were implanted in swines; after four weeks the animals were anesthetized and the artery segments removed for histomorphometric anal.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:855982 CAPLUS
DOCUMENT NUMBER: 139:338810
TITLE: Hydrogels having enhanced elasticity and mechanical strength properties
INVENTOR(S): Omidian, Hossein; Qiu, Yong; Yang, Shicheng; Kim, Dukjoon; Park, Haesun; Park, Kinam
PATENT ASSIGNEE(S): Purdue Research Foundation, USA
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003089506 | A1 | 20031030 | WO 2003-US12340 | 20030422 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2003232895 | A1 | 20031218 | US 2003-420323 | 20030422 |
| PRIORITY APPLN. INFO.: | | | US 2002-374388P | P 20020422 |

AB Hydrogels having improved elasticity and mech. strength properties are obtained by subjecting a hydrogel formulation containing a strengthening agent to chemical or phys. crosslinking conditions subsequent to initial gel formation. Superporous hydrogels having improved elasticity and mech. strength properties are similarly obtained whenever the hydrogel formulation is provided with a foaming agent. Interpenetrating networks of polymer chains comprised of primary polymer(s) and strengthening polymer(s) are thereby formed. The primary polymer affords capillary-based water sorption properties while the strengthening polymer imparts significantly enhanced mech. strength and elasticity to the hydrogel or superporous hydrogel. Suitable strengthening agents can be natural or synthetic polymers, polyelectrolytes, or neutral, hydrophilic polymers. Thus, 50% acrylamide solution 500, 1.0% N,N-methylenebisacrylamide solution 100, 10.0% Pluronic F 127 solution 50, glacial acetic acid 50, and 2% aqueous sodium alginate solution 1500 μl were mixed, 50 μl 20% ammonium persulfate solution and 50 μl 20% N,N,N',N'-tetramethylenediamine solution was added therein, 30 mg sodium bicarbonate was added therein and reacted,

poured into an 30% aqueous calcium chloride solution, washed, and dried to give a porous hydrogel with good stretching, compression, and bending stress resistance.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:117557 CAPLUS
DOCUMENT NUMBER: 138:158821
TITLE: Inorganic-conditioning agent complexes for the controlled release of medicinals
INVENTOR(S): Royer, Garfield P.; Manda, Joseph A.
PATENT ASSIGNEE(S): Royer Biomedical, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003011214 | A2 | 20030213 | WO 2002-US21646 | 20020226 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-308593P P 20010731

AB This invention relates generally to the production and use of inorg.-conditioning agent complexes for the controlled release of compds. including medicinals. The inorg. used is calcium sulfate and the conditioning agent is calcium stearate. A cement for treating periodontal defects was prepared containing doxycycline pamoate, calcium sulfate, Polysorb 80, and PEG.

L11 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:850328 CAPLUS
DOCUMENT NUMBER: 137:363076
TITLE: Mucin synthesis inhibitors for controlling over production of mucin
INVENTOR(S): Zhou, Yuhong; Levitt, Roy C.; Nicolaides, Nicholas C.; Jones, Steve; McLane, Mike
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of U. S. Ser. No. 774,243.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2002165244 | A1 | 20021107 | US 2001-920287 | 20010802 |
| US 2001041685 | A1 | 20011115 | US 2001-774243 | 20010131 |
| US 6737427 | B2 | 20040518 | | |
| US 2002147216 | A1 | 20021010 | US 2001-951906 | 20010914 |
| JP 2002338493 | A2 | 20021127 | JP 2001-316112 | 20011012 |
| JP 2002338494 | A2 | 20021127 | JP 2001-316115 | 20011012 |
| WO 2003011294 | A2 | 20030213 | WO 2002-US21315 | 20020802 |
| WO 2003011294 | A3 | 20040311 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,

CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|---|---|---|---|---|---|
| EP 1418914 | A2 | 20040519 | EP 2002-749809 | | 20020802 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | | |
| US 2003236220 | A1 | 20031225 | US 2002-290443 | | 20021108 |
| US 2004254096 | A1 | 20041216 | US 2004-838338 | | 20040505 |
| PRIORITY APPLN. INFO.: | | | US 2000-179127P | P | 20000131 |
| | | | US 2000-193111P | P | 20000330 |
| | | | US 2000-230783P | P | 20000907 |
| | | | US 2000-242134P | P | 20001023 |
| | | | US 2000-252052P | P | 20001120 |
| | | | US 2001-774243 | A2 | 20010131 |
| | | | US 2001-918711 | A2 | 20010801 |
| | | | US 2001-920287 | A2 | 20010802 |
| | | | US 2001-951906 | A | 20010914 |
| | | | WO 2002-US21315 | W | 20020802 |

OTHER SOURCE(S): MARPAT 137:363076

AB The claimed invention relates to methods of modulating mucin synthesis and the therapeutic application of compds. in controlling mucin over-production associated with diseases such as chronic obstructive pulmonary diseases (COPD) including asthma and chronic bronchitis, inflammatory lung diseases, cystic fibrosis and acute or chronic respiratory infectious diseases. Talniflumate inhibited mucin over production in mice models of asthma.

L11 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:716321 CAPLUS
DOCUMENT NUMBER: 137:246527
TITLE: Multivalent MHC constructs: Immunoanalysis, diagnosis and therapy
INVENTOR(S): Winther, Lars; Petersen, Lars Oestergaard; Buus, Soeren; Schoeller, Joergen; Ruub, Erik; Aamellem, Oeystein
PATENT ASSIGNEE(S): Dako A/S, Den.; Dynal Biotech Asa
SOURCE: PCT Int. Appl., 304 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2002072631 | A2 | 20020919 | WO 2002-DK169 | | 20020313 |
| WO 2002072631 | C1 | 20021128 | | | |
| WO 2002072631 | A3 | 20031106 | | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| CA 2440773 | AA | 20020919 | CA 2002-2440773 | | 20020313 |
| EP 1377609 | A2 | 20040107 | EP 2002-706685 | | 20020313 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| JP 2005500257 | T2 | 20050106 | JP 2002-571544 | | 20020313 |
| NO 2003004020 | A | 20031106 | NO 2003-4020 | | 20030911 |
| PRIORITY APPLN. INFO.: | | | DK 2001-435 | A | 20010314 |
| | | | DK 2001-436 | A | 20010314 |
| | | | DK 2001-441 | A | 20010314 |
| | | | US 2001-275447P | P | 20010314 |
| | | | US 2001-275448P | P | 20010314 |
| | | | US 2001-275470P | P | 20010314 |
| | | | WO 2002-DK169 | W | 20020313 |

AB The authors disclose MHC mol. constructs (classical and non-classical) **conjugated** to soluble or insol. carriers wherein the affinity and avidity of the constructs exceed that of comparable MHC tetramers. In one example, the construct is comprised of biotinylated HLA-A2 bound to FITC-labeled streptavidin **conjugated** to soluble derivatized dextran. The above construct loaded with MART-1 or influenza virus peptides was shown to effect T-cell activation at a lower concentration than.

Also comprised by the present invention is the sample-mounted use of MHC mols., MHC mol. multimers, and MHC mol. constructs.

L11 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:555628 CAPLUS
DOCUMENT NUMBER: 137:114498
TITLE: Nucleic acid delivery formulations
INVENTOR(S): Barman, Shikha P.; Roy, Krishnendu; Hedley, Mary Lynne; Wang, Daqing
PATENT ASSIGNEE(S): Zycos Inc., USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002057424 | A2 | 20020725 | WO 2002-US1379 | 20020117 |
| WO 2002057424 | A3 | 20021003 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2435287 | AA | 20020725 | CA 2002-2435287 | 20020117 |
| EP 1352072 | A2 | 20031015 | EP 2002-713428 | 20020117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004521109 | T2 | 20040715 | JP 2002-558478 | 20020117 |
| US 2004147466 | A1 | 20040729 | US 2004-466289 | 20040315 |

| PRIORITY APPLN. INFO.: | | |
|---|---|---|
| US 2001-262219P | P | 20010117 |
| US 2001-270256P | P | 20010220 |
| US 2001-300484P | P | 20010622 |
| WO 2002-US1379 | W | 20020117 |

AB The invention is based on the discovery that injectable and nucleic acid-compatible polymeric compns. and formulations can be structurally designed to regulate nucleic acid activity or gene expression in vivo, for example, by controlling the bioavailability of the nucleic acid via modulation of the biodegradability and crosslink d. of the network formed by the components of the formulation. The polymeric network encases the nucleic acid, not only controlling the release of the **DNA**, but also providing protection from degradation The invention described herein improves upon prior modes of gene delivery, in that gene expression can be regulated by modulation of a polymeric network formed by combination of at least two water-soluble components capable of reacting with one another. The nucleic acid of interest is incorporated into the network to be released in a sustained manner to achieve level and duration of activity or expression needed.

L11 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:487335 CAPLUS
DOCUMENT NUMBER: 137:68153
TITLE: Novel in-situ forming polymer-based controlled release microcarrier delivery systems
INVENTOR(S): Bhagwatwar, Harshal Prabhakar; Bapat, Varada Ramesh; Paithankar, Mahesh Balkrishna; Yeola, Bhushan Subhash; Gosavi, Arun Shriniwas; Bagool, Manoj Anil; Shetty, Nitin; Shukla, Milind Chintaman; De Souza, Noel John; Khorakiwala, Habil Fakhruddin
PATENT ASSIGNEE(S): India
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002049573 | A2 | 20020627 | WO 2001-IN219 | 20011214 |

WO 2002049573 A3 20030130
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2003049320 A1 20030313 US 2001-23427 20011212
CA 2436149 AA 20020627 CA 2001-2436149 20011214
AU 2002022505 A5 20020701 AU 2002-22505 20011214
EP 1363556 A2 20031126 EP 2001-271193 20011214
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: US 2000-256319P P 20001218
WO 2001-IN219 W 20011214

AB A ready-to use, stable, gelled polymer droplet-in-oil dispersion is described which helps in in-situ formation of a multitude of small solid, semisolid, or gelled microcarriers. The dispersion is placed into a body in a semisolid form and cures to form the delivery system in-situ. The process for making such a dispersion comprises the steps of (i) dissolving a polymer in a biocompatible solvent at an elevated temperature to form a polymer solution, (ii) preparing a second oil phase solution of a biocompatible emulsifier at an elevated temperature, (iii) mixing the polymer solution with the oil phase solution at an elevated temperature and subsequently cooling to refrigeration temperature Placing the gelled dispersion within a body produces the microcarrier delivery system in-situ. The composition of a syringeable, biodegradable dispersion incorporating an effective level of a biol. active agent before injection into a body provides a novel controlled delivery system of drugs for health-care applications. Thus, Poly(DL-lactide-co-glycolide) was dissolved in DMSO to form a polymer solution of a 30% weight/weight concentration To this solution was added leuprolide acetate to form a 10% weight/weight solution of the drug with respect to the polymer. The polymer solution was injected by into a continuous oil phase comprising a 20% weight/weight solution of sorbitan monostearate (Arlacel 60) in super refined sesame seed oil maintained at 70-75°, accompanied by high speed homogenization at 13,000 rpm, for 3 min. The resulting polymer droplet-in-oil dispersion was cooled to room temperature with continuous mixing to obtain an opaque mass with a gel-like consistency, which did not flow. The gel was stored under refrigerated conditions until further use. The gel was smooth to the touch with an absence of any gritty particles. Microscopic observation of the gel revealed discrete distorted blue colored droplets of the discontinuous phase dispersed within the continuous oil phase.

L11 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:368286 CAPLUS
DOCUMENT NUMBER: 136:374550
TITLE: A skin cream composition containing **chitosan conjugates**
INVENTOR(S): Wadstein, Jan
PATENT ASSIGNEE(S): Wadlund AS, Norway
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002038123 | A1 | 20020516 | WO 2001-NO437 | 20011101 |
| W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| NO 310176 | B1 | 20010605 | NO 2000-5718 | 20001113 |
| AU 2002016473 | A5 | 20020521 | AU 2002-16473 | 20011101 |

EP 1341517 A1 20030910 EP 2001-993455 20011101
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2004043963 A1 20040304 US 2003-416671 20030922
PRIORITY APPLN. INFO.: NO 2000-5718 A 20001113
WO 2001-NO437 W 20011101

AB The present invention is related to compns. containing **chitosan conjugated** CLA (**conjugated** linoleic acid) and a **chitosan conjugated** Vitamin A or a β-**cyclodextrin conjugated** vitamin A. The invention also concerns the preparation of the compns. The compns. according to the invention can be used as topical and cosmetic compns. as well as pharmaceutical compns. for treatment of atypical dermatitis, psoriasis eczema as well as eczema of different origins and solar dermatitis.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:935443 CAPLUS
DOCUMENT NUMBER: 136:58849
TITLE: Compositions and methods to improve the oral absorption of antimicrobial agents
INVENTOR(S): Choi, Seung-Ho; Lee, Jeoung-Soo; Keith, Dennis
PATENT ASSIGNEE(S): Cubist Pharmaceuticals, Inc., USA; International Health Management Associates, Inc.; University of Utah Research Foundation
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001097851 | A2 | 20011227 | WO 2001-US19625 | 20010618 |
| WO 2001097851 | A3 | 20020516 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6248360 | B1 | 20010619 | US 2000-598089 | 20000621 |
| CA 2413251 | AA | 20011227 | CA 2001-2413251 | 20010618 |
| EP 1294361 | A2 | 20030326 | EP 2001-944619 | 20010618 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2001012393 | A | 20030708 | BR 2001-12393 | 20010618 |
| JP 2003535911 | T2 | 20031202 | JP 2002-503335 | 20010618 |
| NZ 523276 | A | 20050225 | NZ 2001-523276 | 20010618 |
| US 2003039956 | A1 | 20030227 | US 2001-888114 | 20010622 |
| PRIORITY APPLN. INFO.: | | | US 2000-598089 A | 20000621 |
| | | | US 2001-829405 A | 20010409 |
| | | | US 2001-283976P P | 20010416 |
| | | | WO 2001-US19625 W | 20010618 |

AB The present invention provides compns. and methods for increasing absorption of antibacterial agents, particularly third generation cephalosporin antibacterial agents, in oral dosage solid and/or suspension forms. Specifically, the composition is comprised of a biopolymer that is preferably swellable and/or mucoadhesive, an antimicrobial agent, and a cationic binding agent contained within the biopolymer such that the binding agent is ionically bound or complexed to at least one member selected from the group consisting of the biopolymer and the antimicrobial agent. A solution of 44.5 mg calcium chloride in 10 mL water and 1.0 g of ceftriaxone in 10 mL water was added gradually to a solution of 400 mg carrageenan and the dispersion was centrifuged and the supernatant was lyophilized. The resulting composition comprised carrageenan 27.7, ceftriaxone 1, and calcium chloride 3.1%. Plasma concentration of different antimicrobial-biopolymer complexes after oral administration to rats was measured.

L11 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:833060 CAPLUS
DOCUMENT NUMBER: 135:376741
TITLE: Stable metal ion-lipid powdered pharmaceutical compositions
INVENTOR(S): Dellamary, Luis A.; Riess, Jean; Schutt, Ernest G.; Weers, Jeffry G.; Tarara, Thomas E.
PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., USA
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001085137 | A2 | 20011115 | WO 2001-US14824 | 20010508 |
| WO 2001085137 | A3 | 20020418 | | |
| W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6630169 | B1 | 20031007 | US 2000-720536 | 20001222 |
| CA 2408464 | AA | 20011115 | CA 2001-2408464 | 20010508 |
| EP 1282405 | A2 | 20030212 | EP 2001-933194 | 20010508 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003533449 | T2 | 20031111 | JP 2001-581791 | 20010508 |

| PRIORITY APPLN. INFO.: | | | |
|---|---|---|---|
| US 2000-568818 | A | 20000510 |
| WO 1999-US6855 | W | 19990331 |
| WO 2001-US14824 | W | 20010508 |

AB Microparticle compns. comprising metal ion-lipid complexes for drug delivery are described including methods of making the microparticle compns. and methods of treating certain conditions and disease states by administering the microparticle compns. The metal ion-lipid complexes can be combined with various drugs or active agents for therapeutic administration. The microparticle compns. of the present invention have superior stability to other microparticle compns. resulting in a microparticle composition with longer shelf life and improved dispersibility. The microparticle compns. of the present invention have a transition temperature (Tm) of at least 20° above the recommended storage temperature (Tst) for drug delivery. An aqueous preparation was prepared by mixing two prepns., A and B, immediately prior to spray drying. The preparation A was comprised of a fluorocarbon-in-water emulsion in which 26 g perfluorooctyl bromide was dispersed in 33 g water with the aid of 1.30 g of SPC-3 emulsifier (hydrogenated soy phosphatidylcholine). The preparation B contained 0.162 g CaCl2.2H20 and 0.162 g budesonide dissolved/suspended in 4 g water. The resulting microparticle of the sample had a PL-budesonide-CaCl2.2H20 weight ratio of about 80:10:10. The mean volume aerodynamic particle size of the dry powder was approx. 4.1 μm.

L11 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:822465 CAPLUS
DOCUMENT NUMBER: 135:357127
TITLE: **Chitosan**-containing beverage
INVENTOR(S): Yamaguchi, Yasuyo
PATENT ASSIGNEE(S): Kobayashi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2001316271 | A2 | 20011113 | JP 2000-132414 | 20000501 |

| PRIORITY APPLN. INFO.: | | |
|---|---|---|
| JP 2000-132414 | | 20000501 |

AB **Chitosan**-containing beverage is prepared from **chitosan** with the addition of trehalose, glycine, sodium gluconate, etc. to mask the

off-odor of the **chitosan**; and of xanthan gum, pectin, etc., to prevent precipitation The **chitosan**-containing beverage is useful for prevention and control of gout and hyperuricemia.

L11 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:584837 CAPLUS
DOCUMENT NUMBER: 136:221495
TITLE: The effect of a new skin ointment on skin thickness and elasticity
AUTHOR(S): Thom, E.; Gudmundsen, O.; Wadstein, J.
CORPORATE SOURCE: Parexel Norway AS, Lillestrom, Norway
SOURCE: Journal of Applied Cosmetology (2001), 19(2), 51-57
CODEN: JACOEL; ISSN: 0392-8543
PUBLISHER: International Ediemme
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The present open pilot study was carried out in order to investigate a new patented concept for skin treatment. The new concept is intended for use in treatment of ageing skin. The ointment contains **conjugated** linoleic acid (CLA) and retinyl palmitate (RP). Both ingredients are **conjugated** with the biopolymer **chitosan** in order to improve water solubility, increase skin penetration and inhibit oxidation of the active substances. A number of studies have previously been carried out with **conjugated** retinyl palmitate, where the **conjugation** mostly has been done using β- **cyclodextrin**. We included 20 females in our study and the treatment period was three months. Objective measurements of skin-thickness and elasticity were carried out initially and after three months. Subjective observations and scores were performed by the participants themselves using visual analog scales (VASs) initially and at the end of the study. The results showed a significant improvement in skin quality both with regard to objective as well as in subjective parameters after treatment with the new ointment. In comparison to our previous studies with ointments containing only **conjugated** RP the effects on skin thickness and elasticity were more pronounced with the new formulation showing an average improvement in skin thickness of 51% and in skin elasticity of 27%. The self evaluation scores of the participants were also highly favorable and significant, and all of the participants would like to continue with the ointment after the formal study was closed. The tolerability of the treatment was excellent and all subjects concluded the study according to the protocol.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:564827 CAPLUS
DOCUMENT NUMBER: 135:147436
TITLE: Mucin synthesis inhibitors and their therapeutic use
INVENTOR(S): Zhou, Yuhong; Levitt, Roy C.; Nicolaides, Nicholas C.; Jones, Steve; McLane, Mike
PATENT ASSIGNEE(S): Magainin Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2001054685 | A1 | 20010802 | WO 2001-US3078 | | 20010131 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | | |
| CA 2398642 | AA | 20010802 | CA 2001-2398642 | | 20010131 |
| EP 1255544 | A1 | 20021113 | EP 2001-906804 | | 20010131 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| JP 2004507444 | T2 | 20040311 | JP 2001-554669 | | 20010131 |
| PRIORITY APPLN. INFO.: | | | US 2000-179127P | P | 20000131 |
| | | | US 2000-193111P | P | 20000330 |

| | | |
|---|---|---|
| US 2000-230783P | P | 20000907 |
| US 2000-242134P | P | 20001023 |
| US 2000-252052P | P | 20001120 |
| WO 2001-US3078 | W | 20010131 |

OTHER SOURCE(S): MARPAT 135:147436

AB Methods are provided for modulating mucin synthesis and the therapeutic application of compds. in controlling mucin over-production associated with diseases such as chronic obstructive pulmonary diseases (COPD), including asthma and chronic bronchitis, inflammatory lung diseases, cystic fibrosis and acute or chronic respiratory infectious diseases.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:535393 CAPLUS
DOCUMENT NUMBER: 136:221564
TITLE: Polysaccharides in colon-specific drug delivery
AUTHOR(S): Sinha, V. R.; Kumria, R.
CORPORATE SOURCE: University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh, 160 014, India
SOURCE: International Journal of Pharmaceutics (2001), 224(1-2), 19-38
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. Natural polysaccharides are now extensively used for the development of solid dosage forms for delivery of drug to the colon. The rationale for the development of a polysaccharide based delivery system for colon is the presence of large amts. of polysaccharidases in the human colon as the colon is inhabited by a large number and variety of bacteria which secrete many enzymes e.g. β-D-glucosidase, β-d-galactosidase, amylase, pectinase, xylanase, β-d-xylosidase, dextranase, etc. Various major approaches utilizing polysaccharides for colon-specific delivery are fermentable coating of the drug core, embedding of the drug in biodegradable matrix, formulation of drug-saccharide **conjugate** (prodrugs). A large number of polysaccharides have already been studied for their potential as colon-specific drug carrier systems, such as **chitosan**, pectin, chondroitin sulfate, **cyclodextrin**, dextrans, guar gum, inulin, amylose and locust bean gum. Recent efforts and approaches exploiting these polysaccharides in colon-specific drug delivery are discussed.

REFERENCE COUNT: 141 THERE ARE 141 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:300486 CAPLUS
DOCUMENT NUMBER: 134:331616
TITLE: Sustained release microspheres based on a carrier protein, a water soluble polymer and complexing agents
INVENTOR(S): Scott, Terrence L.; Brown, Larry R.; Riske, Frank J.; Blizzard, Charles D.; Rashba-Step, Julia
PATENT ASSIGNEE(S): Epic Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001028524 | A1 | 20010426 | WO 2000-US28200 | 20001012 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6458387 | B1 | 20021001 | US 1999-420361 | 19991018 |
| EP 1223917 | A1 | 20020724 | EP 2000-973477 | 20001012 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

IE, SI, LT, LV, FI, RO, MK, CY, AL
US 2003059474 A1 20030327 US 2002-245776 20020917
PRIORITY APPLN. INFO.: US 1999-420361 A 19991018
WO 2000-US28200 W 20001012

AB A microsphere composition for sustained release of therapeutic or diagnostic agents comprises (1) a carrier protein, (2) a water-soluble polymer, (3) a polyanionic polysaccharide as a first complexing agent, and (4) a divalent metal cation (Ca and Mg) as a second complexing agent. The microspheres have a smooth surface that includes a plurality of channel openings that are < 1000 Å in diameter Various drugs were encapsulated into microspheres. For example, microspheres containing leuprolide acetate were prepared using human serum albumin (HSA), dextran sulfate, polyethylene glycol, and polyvinylpyrrolidone. The microspheres were composed of approx. 10% leuprolide acetate, 50% human serum albumin, 20% dextran sulfate and 20% polyethylene glycol/polyvinylpyrrolidone. Similar particles were prepared which also included zinc sulfate or caprylic acid, both of which retarded the release of protein and peptide from the microspheres. Also, rifampicin-containing HSA microspheres were prepared with HSA incorporation of 74% and rifampicin incorporation into the particles of > 6.8%. The average size of the particles was determined to be 68 nm in diameter
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:136991 CAPLUS
DOCUMENT NUMBER: 134:198075
TITLE: Triglyceride-free compositions and methods for enhanced absorption of hydrophilic therapeutic agents
INVENTOR(S): Patel, Mahesh V.; Chen, Feng-Jing
PATENT ASSIGNEE(S): Lipocine, Inc., USA
SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 12
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001012155 | A1 | 20010222 | WO 2000-US18807 | 20000710 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6309663 | B1 | 20011030 | US 1999-375636 | 19990817 |
| CA 2380642 | AA | 20010222 | CA 2000-2380642 | 20000710 |
| EP 1210063 | A1 | 20020605 | EP 2000-947184 | 20000710 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| JP 2003506476 | T2 | 20030218 | JP 2001-516502 | 20000710 |
| NZ 517659 | A | 20041224 | NZ 2000-517659 | 20000710 |
| US 2001024658 | A1 | 20010927 | US 2000-751968 | 20001229 |
| US 6458383 | B2 | 20021001 | | |

PRIORITY APPLN. INFO.: US 1999-375636 A 19990817
WO 2000-US18807 W 20000710

AB The present invention relates to triglyceride-free pharmaceutical compns., pharmaceutical systems, and methods for enhanced absorption of hydrophilic therapeutic agents. The compns. and systems include an absorption enhancing carrier, where the carrier is formed from a combination of at least two surfactants, at least one of which is hydrophilic. A hydrophilic therapeutic agent can be incorporated into the composition, or can be co-administered with the composition as part of a pharmaceutical system. The invention also provides methods of treatment with hydrophilic therapeutic agents using these compns. and systems. For example, when a composition containing Cremophor RH40 0.30, Arlacel 186 0.20, Na taurocholate 0.18, and propylene glycol 0.32 g, resp., was used, the relative absorption of PEG 4000 as a model macromol. drug was enhanced by 991%.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:553206 CAPLUS
DOCUMENT NUMBER: 133:155161
TITLE: Cosmetic composition for protecting the scalp from free radicals
INVENTOR(S): Herrling, Thomas; Groth, Norbert; Golz-Berner, Karin; Zastrow, Leonhard
PATENT ASSIGNEE(S): Coty B. V., Neth.
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1025835 | A2 | 20000809 | EP 2000-250030 | 20000131 |
| EP 1025835 | A3 | 20010801 | | |
| EP 1025835 | B1 | 20050323 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| DE 19905127 | A1 | 20000810 | DE 1999-19905127 | 19990201 |
| PRIORITY APPLN. INFO.: | | | DE 1999-19905127 A | 19990201 |

AB The title composition comprises an aqueous dispersion, emulsion, or hydrogel containing 0.5-30 weight% enzymic radical scavenger and 0.1-20 weight% water-soluble or -dispersible film-forming agent (shellac and/or dextrin). Thus, a radical scavenger complex comprised phospholipids 7, quebracho extract (containing proanthocyanidin oligomers and gallic acid) 2, silkworm extract (containing cecropin, amino acids, and vitamins) 1, acerola (Malpighia punicifolia) fruit extract 1, vitamin C 0.5, and vitamin A 0.5% in a gel base containing Carbomer, EtOH, and glycerin. This complex 30.0, α-dextrin 5.0, β-dextrin 2.5, γ-dextrin 5.0, preservative 0.5, and H2O to 100 weight% were combined to produce a scalp spray.

L11 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:157862 CAPLUS
DOCUMENT NUMBER: 132:199065
TITLE: Pharmaceutical preparation containing colloidal polymer-active substance complexes, in particular for mucosal administration
INVENTOR(S): Kissel, Thomas; Breitenbach, Armin; Jung, Tobias; Kamm, Walter
PATENT ASSIGNEE(S): Germany
SOURCE: Ger. Offen., 40 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 19839515 | A1 | 20000309 | DE 1998-19839515 | 19980829 |
| PRIORITY APPLN. INFO.: | | | DE 1998-19839515 | 19980829 |

AB Water-soluble, biodegradable polyol esters form colloidal complexes with pharmacol. active proteins, glycoproteins, peptides, growth factors, **oligonucleotides**, and **DNA** constructs and are useful as carriers for these substances in pharmaceutical dosage forms. Lipophilic polyol esters are converted into nanoparticles by controlled precipitation and subsequently loaded with active substances for the same purpose. In both cases, the resulting active substance-containing colloids show improved bioavailability, biodistribution, and effectiveness in human or veterinary applications after mucosal application. These carriers may also be useful for parenteral administration and transport of active substances to targeted sites in the body. Thus, a 1:1 M mixture of DL-lactide and glycolide was melt-grafted onto poly(vinyl alc.) with various degrees of substitution. The resulting water-soluble ester formed a complex with tetanus toxoid, the particle size of which depended on ionic strength, pH, and the presence of emulsifiers.

L11 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:602055 CAPLUS
DOCUMENT NUMBER: 129:312586
TITLE: Purification and characterization of three thermostable endochitinases of noble Bacillus strain, MH-1, isolated from chitin-containing compost

AUTHOR(S): Sakai, Kenji; Yokota, Akira; Kurokawa, Hajime; Wakayama, Mamoru; Moriguchi, Mitsuaki
CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Engineering, Oita University, Oita, 870-1192, Japan
SOURCE: Applied and Environmental Microbiology (1998), 64(9), 3397-3402
CODEN: AEMIDF; ISSN: 0099-2240
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A thermophilic and actinic bacterium strain, MH-1, which produced 3 different endochitinases in its culture fluid was isolated from chitin-containing compost. The microorganism did not grow in any of the usual media for actinomyces but only in colloidal chitin supplemented with yeast extract and (2,6-O-dimethyl)-β- **cyclodextrin**. Compost extract enhanced its growth. In spite of the formation of branched mycelia, other properties of the strain, such as the formation of endospores, the presence of meso-diaminopimelic acid in the cell wall, the percent G+C in **DNA** (55%), and the partial 16 S ribosomal **DNA** sequence, indicated that strain MH-1 should belong to the genus Bacillus. Three chitinase isoforms (L, M, and S) were purified to homogeneity and characterized from Bacillus sp. strain MH-1. Chitinases L, M, and S had different resp. mol. wts. (71, 62, and 53 kDa), pI values (5.3, 4.8, and 4.7), and N-terminal amino acid sequences. Chitinases L, M, and S showed, resp., relatively high temperature optima (75, 65, and 75°) and stabilities, and exhibited pH optima in the acidic range (pH 6.5, 5.5, and 5.5). When reacted with acetylchitohexaose [(GlcNAc)6], chitinases L and S produced (GlcNAc)2 at the highest rate, whereas chitinase M produced (GlcNAc)3 at the highest rate. None of the 3 chitinases hydrolyzed (GlcNAc)2. Chitinase L produced (GlcNAc)2 and (GlcNAc)3 in greatest abundance from 66 and 11% partially acetylated **chitosan**. The p-nitrophenol (pNP)-releasing activity of chitinase L was highest toward pNP-(GlcNAc)2, and those of chitinases M and S were highest toward pNP-(GlcNAc)3. All 3 enzymes were inert to pNP-GlcNAc. AgCl, HgCl2, and (GlcNAc)2 inhibited the activities of all 3 enzymes, whereas MnCl2 and CaCl2 slightly activated all of the enzymes.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:439388 CAPLUS
DOCUMENT NUMBER: 129:180116
TITLE: Synthesis and preliminary studies on a β-**cyclodextrin**-coupled **chitosan** as a novel adsorbent matrix
AUTHOR(S): Sreenivasan, K.
CORPORATE SOURCE: Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Trivandrum, 695012, India
SOURCE: Journal of Applied Polymer Science (1998), 69(6), 1051-1055
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A novel adsorbent matrix is synthesized by coupling β-**cyclodextrin** to **chitosan** using 1,6-hexamethylene diisocyanate. The matrix is found insol. in organic as well as acidic or alkaline media. The results of our preliminary study on its interaction with cholesterol indicates that the modified **chitosan** could be used as a novel, reusable sorbent matrix.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:69602 CAPLUS
DOCUMENT NUMBER: 120:69602
TITLE: Preparation and use of polyanionic polymer-based **conjugates** targeted to vascular endothelial cells
INVENTOR(S): Thorpe, Philip E.
PATENT ASSIGNEE(S): University of Texas System, USA; Imperial Cancer Research Technology Ltd.
SOURCE: PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9318793 | A1 | 19930930 | WO 1993-US2619 | 19930322 |
| W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, KP, KR, LU, MG, MN, MW, NL, NO, PL, PT, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR | | | | |
| US 5474765 | A | 19951212 | US 1992-856018 | 19920323 |
| AU 9338166 | A1 | 19931021 | AU 1993-38166 | 19930322 |
| EP 632728 | A1 | 19950111 | EP 1993-907633 | 19930322 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT | | | | |
| US 5762918 | A | 19980609 | US 1994-307745 | 19941205 |
| PRIORITY APPLN. INFO.: | | | US 1992-856018 | A2 19920323 |
| | | | WO 1993-US2619 | A 19930322 |

AB An anionic polymer (e.g. a heparin derivative) is linked to an active agent (especially a steroid), preferably by a selectively hydrolyzable bond, for delivery of the active agent to vascular endothelial cells. The **conjugates** are useful as angiogenesis inhibitors for treatment of e.g. cancer, arthritis, and diabetic blindness. Thus, heparin was condensed with adipic dihydrazide and then with cortisol; the cortisol:heparin mol ratio in the product was 8-9. This **conjugate** was markedly acid labile, suppressed **DNA** synthesis and cell migration in human umbilical vein endothelial cells, retarded or abolished the vascularization of sponges in vivo, and retarded lung tumor growth in mice by 65%. No adverse effects of the **conjugate** were detected, and equivalent treatments with a mixture of heparin and cortisol were significantly less effective in all cases.

L11 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:555533 CAPLUS
DOCUMENT NUMBER: 119:155533
TITLE: Preparation of monosubstituted tetrahalopyridines and disubstituted trihalopyridines photochemically grafted at the 4-position to other molecules
INVENTOR(S): Baillarge, Michele; Meziane Cherif, Djalal; Braun, Jacques; Le Goffic, Francois; Francois, Le Goffic
PATENT ASSIGNEE(S): Vegatec S.a.r.L., Fr.
SOURCE: Fr. Demande, 25 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| FR 2676732 | A1 | 19921127 | FR 1991-6200 | 19910523 |
| FR 2676732 | B1 | 19950224 | | |
| PRIORITY APPLN. INFO.: | | | FR 1991-6200 | 19910523 |

AB 4-Azido-2,3,5,6-tetrafluoropyridine (I) and 4-azido-3,5-dichloro-2,6-difluoropyridine are photochem. reacted with a variety of mols., e.g. with polyethylene, polypropylene, latex, polysaccharides, proteins, lipids, nucleic acids, cells, etc. The halopyridine may have a nucleophile at the 2-position. The products are useful as supports in peptide and **oligonucleotide** synthesis, immunoassays, biol., biotechnol. (biocatalysts), etc. (no data). PVDF membranes were immersed in a methanolic solution of I, dried, irradiated 15 min, and washed with MeOH until the wash solution absorption at 254 nm dropped to 0. The membranes were then incubated with a solution of biotin hexamethylene diamine to make membranes for affinity purification of streptavidin.

L11 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:241988 CAPLUS
DOCUMENT NUMBER: 116:241988
TITLE: Skin cosmetics containing liposomes comprising a light-degradable phosphatidylcholine
INVENTOR(S): Hashimoto, Akira; Kusumi, Akihiro; Yamaguchi, Kazuo
PATENT ASSIGNEE(S): Sunstar, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 04029915 | A2 | 19920131 | JP 1990-136530 | 19900524 |

PRIORITY APPLN. INFO.: JP 1990-136530 19900524

AB Skin cosmetics contain light-degradable liposomes comprising 2-O2NC6H4CH2O2C(CH2)10CO2CH2CH[O2C(CH2)10CO2CH2C6H4NO2-2]CH2OP(O)(O-)O(CH2)2NMe3+(I). 1,10-Decanedicarboxylic acid (II) was refluxed with SOCl2 for 3 h to give 77% II dichloride, which was treated with 2-nitrobenzyl alc. and Et3N in THF at room temperature for 11 h to give 15% II mono-2-nitrobenzyl ester. This was stirred with sn-glycero-3-phosphocholine-CdCl2 complex, DCCD, and 4-dimethylaminopyridine in CHCl3 at room temperature under dark for 4 days to give 82% I. A CHCl3 solution containing I was charged in a test tube, dried, mixed with a buffer containing vitamin C at 50° for 10 min, treated with hypersonic waves, and subjected to gel permeation chromatog. to give liposomes, which were irradiated by UV-light for 5 min to release 100% vitamin C. A lotion containing the liposomes (containing vitamin C) was formulated.